## Claims:

- 1. A method of producing an antimicrobial plastic product, comprising
  - A) forming an intermediate product,
  - B) treating at least one constituent of the intermediate product with an antimicrobial metal colloid, and
  - C) adding a readily or sparingly soluble salt of an antimicrobial metal.

10

5

2. The method of claim 1, characterized in that the sparingly soluble metal salt is selected from the group consisting of silver salts, zinc salts, copper salts, cerium salts, zirconium salts, bismuth salts, platinum salts and/or gold salts.

15

- 3. The method of claim 2, characterized in that the metal salt comprises silver sulfate and/or silver phosphate.
- 4. The method of claim 3, characterized in that the metal salt is present in an amount of from 0.1 to 1.0% by weight, based on the total weight of the intermediate product.
  - 5. The method of claim 2, characterized in that the metal salt is present in a silver/copper ratio of approximately 2:1.

25

- 6. The method of one of claims 1 to 5, characterized in that the intermediate product comprises one or more polymeric materials.
- 7. The method of claim 6, characterized in that the intermediate product comprises polyurethane.
  - 8. The method of one of claims 1 to 7, characterized in that the intermediate product comprises further additives.
- The method of claim 8, characterized in that the additives comprise organic or inorganic particles.
  - 10. The method of claim 9, characterized in that the organic and/or inorganic particles are selected from the group consisting of barium sul-

REPLACED BY ART 34 AMDT fate, calcium sulfate, strontium sulfate, titanium dioxide, aluminum oxide, silicon dioxide, zeolites, calcium fluoride (CaF<sub>2</sub>), mica, talc, pyrogenic silica, calcium hydroxylapatite, kaolin and/or microcellulose.

5

20

- 11. The method of claim 10, characterized in that the inorganic particles comprise barium sulfate and/or pyrogenic silica.
- 12. The method of one of claims 1 to 11, characterized in that polymeric materials and inorganic particles are treated with a metal colloid.
  - 13. The method of one of claims 1 to 11, characterized in that inorganic particles are treated with a metal colloid.
- 15 14. The method of one of the preceding claims, characterized in that the metal colloid comprises colloidal silver.
  - 15. The method of one of the preceding claims, characterized in that the mixture of treated intermediate product and sparingly soluble metal salt is shaped by extruding, injection molding, mixing, kneading or (hot) pressing.
  - 16. Plastic products obtainable according to one of claims 1 to 15.
- 25 17. Plastic product of claim 16 in the form of a catheter.

